

Water-Data Report 2008

08059400 Sister Grove Creek near Blue Ridge, TX

Upper Trinity Basin East Fork Trinity Subbasin

LOCATION.--Lat 33°17'40", long 96°28'58" referenced to North American Datum of 1927, Collin County, TX, Hydrologic Unit 12030106, on left bank at upstream side of highway embankment of bridge on Farm Road 545, 3.5 mi upstream from Hatler Branch, 4.8 mi west of Blue Ridge, 7.4 mi upstream from Stiff Creek, 14.7 mi upstream from mouth, and 24.7 mi upstream from Lavon Dam.

DRAINAGE AREA.--83.1 mi².

SURFACE-WATER RECORDS

- PERIOD OF RECORD.--July 1975 to Sept. 2001 (daily mean discharge). Oct. 2001 to current year (peaks above base discharge). Water-quality records: Chemical data: Nov. 1985 to June 1987, Oct. 1995 to Nov. 2001. Biochemical data: Nov. 1985 to June 1987, Oct. 1999 to Aug. 1999. Radiochemical data: Mar. to Aug. 1999. Pesticide data: Nov. 2001. Sediment data: Nov. 2001.
- GAGE.--Water-stage recorder. Datum of gage is 526.29 ft above NGVD of 1929. Prior to June 29, 1988, at datum 10.00 ft higher at same site. Satellite telemeter at station.
- REMARKS.--Records fair. Since installation of gage in July 1975, at least 10% of contributing drainage area has been affected at times by discharge from the flood-detention pools of 34 floodwater-retarding structures. These structures control runoff from 47.4 mi². Discharge may contain flow released from Lake Texoma and placed into channel 40 miles upstream from site. No flow at times.
- AVERAGE DISCHARGE FOR PERIOD OF RECORD.--26 years (water years 1975-2001), 69.5 ft³/s (50,340 acre-ft/year).
- EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft³/s, May 13, 1982, gage height, 32.50 ft. Mimimum discharge, no flow at times, most years.
- EXTREMES OUTSIDE PERIOD OF RECORD.--A stage of 30.7 ft, present datum, probably occurred in July 1913, from information by the Texas Department of Transportation. The probable date is from published records for Sister Grove Creek near Princeton (station 08059500, discontinued) located 9.7 mi downstream.

PEAK DISCHARGES FOR CURRENT YEAR .-- Peak discharges greater than base discharge of 692 ft3/s and (or) maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb 16	2130	1,230	22.76
Mar 3	2115	2,020	25.92
Mar 19	0445	*3,430	*27.65
Apr 18	0930	796	20.45
Apr 24	0615	1,180	23.03